

# INFLUENCE OF PLANTING PERIODS AND STANDARDS ON THE ECONOMIC EFFICIENCY OF FALL RYE CULTIVATION.

*Tagaev Abdullajon Makhamatovich*

*Andijan Institute of Agriculture and Agrotechnologies.*

# ВЛИЯНИЕ СРОКОВ И НОРМ ПОСЕВА НА ХОЗЯЙСТВЕННУЮ ЭФФЕКТИВНОСТЬ ВЫРАЩИВАНИЯ ОПАЮЩЕЙ РЖИ

*Тагаев Абдуллажон Махаматович*

*Андижанский институт сельского хозяйства и агротехнологий*

**Abstract:** In the developed countries, which occupy the leading place in the cultivation of rye in the world, the biological and morphological characteristics of the varieties and the soil and climatic conditions of the region are taken into account when determining the sowing dates and the thickness of the seedlings. It is considered necessary to grow a grain crop. Taking this into account, it is necessary to study the biological and morphological characteristics of the newly created rye varieties that meet the requirements of the food industry in terms of quality and quality, and in this regard, optimal sowing of seeds in the regions. One of the urgent issues of today is to conduct scientific research on determining the dates and the norms of planting seeds according to the dates, studying the demand for mineral fertilizers and water.

**Аннотация:** В развитых странах, занимающих ведущее место в возделывании ржи в мире, при определении сроков посева и толщины учитываются биологические и морфологические особенности сортов и почвенно-климатические условия региона. из саженцев. Считается необходимым выращивать зерновые культуры. Учитывая это, необходимо изучить биологические и морфологические особенности вновь созданных сортов ржи, отвечающих требованиям пищевой промышленности по качеству и качеству, и в связи с этим оптимальный посев семян в регионах. Одним из актуальных вопросов современности является проведение научных

исследований по определению сроков и норм посева семян по срокам, изучение потребности в минеральных удобрениях и воде.

**Ключевые слова:** продуктивность, урожайность, урожайность, фенологическое наблюдение, чистая прибыль, средняя урожайность, валовая прибыль, органический материал, мульчирование.

**Key words:** efficiency, yield, yield, phenological observation, net profit, average yield, gross profit, organic material, mulching.

**Enter.** Rye is a cereal crop that has the unique ability to grow in conditions where other cereals cannot. It is resistant to the effects of climate change, can live in cool, temperate, semi-arid and highland regions, and can be grown in marginal, sandy and low-fertility, relatively infertile soils. Rye is primarily a food crop, grown primarily for grain, it is a cereal crop rich in carbohydrates, protein and a number of important minerals and nutrients. It is also used in fodder production, soil mulching to reduce organic matter and weeds. Bread and other products are made from its grain; gives bread products a unique taste that increases their nutritional value and expands marketing opportunities; in addition, rye products have lower levels of gluten than wheat products.

To support the proposal of the Estonian government to declare the International Year of Rye and to issue instructions as deemed necessary; The draft resolution of the Conference contained in Annex A was submitted for review and, where necessary, amendments, to the 41st Session of the Conference (June 22-29, 2019) for consideration and approval.

International Year of Rye complement the United Nations Decade of Action on Food (2016-2025) and emphasize the need for a sustainable food system.

The international community's celebration of the International Year of Rye will significantly increase public awareness of its production and consumption benefits. [1]

Autumn Rye Observed in the Standards Planted in October 1 Period, 5.0 Million Pieces Unuvchen Uryug for Other Periods 1000 Pieces Grain Weight -1.9 GR, Grain Yield 10.6 s/ga straw it was determined that the yield was 20.2 s/ga, and the profitability index was 54.6% [2].

The distribution area of autumn rye is very wide - up to 69 °C in the north, up to 45 °C in the south. The main producers of autumn rye are CIS, Germany, USA, France. Germany, Russia, Poland, Belarus, Ukraine and China account for more than 80% of the rye cultivation area in the world. More than 25% of grossly produced rye grain is grown in Russia [3].

### **Procedure and method of experiment.**

Experiment 15 options were placed in one tier in 3 repetitions. In the experimental field, the width of the embankment is 70 cm, and the length is 100 m. The area of each block is 560 m<sup>2</sup>, the area to be considered is 280 m<sup>2</sup>. The total area of experiments is 2.5 ga. The experiment was conducted for 3 years in a 1:1 (cotton; grain) short rotation cropping system . In the experiment, the "Vakhshskaya-116" variety entered into the State register of autumn rye was planted.

EXPERIMENTAL SYSTEM

<b>There is</b>	<b>Sowing dates</b>	<b>Seeding standards</b>
1	September 20	3 mln.
2		4 mln.
3		5 mln
4	October 1st	3 mln.
5		4 mln.
6		5 mln
7	October 10th	3 mln.
8		4 mln.
9		5 mln

10	October 20th	3 mln.
eleven		4 mln.
12		5 mln
13	November 1	3 mln.
14		4 mln.
15		5 mln

"Methodology of the State variety testing of agricultural crops" (M, Kolos , 1964) was used [4].

provisions for determining the economic efficiency of using research results in agriculture, new technology " inventions, rationalization proposals" (M, 1987) manual was used [5].

### **Experimental results and their analysis**

During 2016-2019, the results from the research carried out on the development of optimal planting dates and seedling thickness in the cultivation of a high and high-quality grain crop from autumn Rye in the conditions of hungry Bush soils of the Andijan region were analyzed economically, determining the difference between the total income from the sale of grown products and production costs.

The data obtained from the experiment show that the seeds of autumn rye are 3 million per hectare in the period of September 20. while the total income from the sale of grain obtained from option 1, planted at the expense of one unit of fertile seed, amounted to 5,544,000 soums, the conditional net profit was 2,474,000 soums, and the profitability indicator was 44.6%, in this period 4 million per hectare. and 56 mln. The total income from the sale of grain obtained from varieties planted with fertile seeds is 6072-6457 thousand soums, conditional net profit is 2927-3237 thousand soums, the profitability index is 48.2-50.1%, 3 million per hectare. it was observed that 3.6-5.5 percent higher than the 1st option, where the seeds were planted.

It was observed that the above laws were reflected in the variants planted in the period of October 10, in which 3 million per hectare. When analyzing the 7-variant planted at the expense of germinating seeds, the total income from the sale of grain was 6435 thousand soums, the conditional net profit was 3365 thousand soums, and the profitability index was 52.3 percent. 7.7 percent higher compared to the 1st option, then 4 million per hectare in this period. and 5 mln. The total income from the sale of grain in the 8-9 options planted at the expense of germinating seeds amounted to 6,842-7,051 thousand soums, the conditional net profit was 3,697-3,831 thousand soums, and the profitability index was 54.0-54.3 percent, 20 September it was observed that it was 5.8-4.2 percent higher than the 2-3 variants planted in the period.

3 mln. The total income from the sale of grain from the 13th option planted at the expense of germinating seeds is 5016 thousand soums, the conditional net profit is 1946 thousand soums, and the profitability indicator is 38.8%, compared to the 1st option planted on September 20, 5 4 million per hectare in this period, if it was found that the result was less than 8%. and 5 mln. In the 14-15 options planted at the expense of germinating seeds, the total income from the sale of grain is 5577-5929 thousand soums, the conditional net profit is 2432-2709 thousand soums, and the profitability indicator is 43.6-45.7 percent. it was observed that it decreased by 4.6-4.4 percent compared to the 2-3 planted options.

**Summary.** It can be seen from the obtained data that in our research on seed sowing dates and seed consumption norms, 4 million per hectare in the periods of October 1 and October 10 are the most effective options. and 5 mln. it was noted that it was manifested in the varieties planted with single viable seeds.

When studying the economic efficiency of planting dates and norms in the cultivation of autumn rye, it was observed in the options planted on October 1 at the rate of 4-5 mln./piece of germinating seeds, the net income was 3752-3875 thousand soums, the yield was 4.6-54.4% did

## Books

1. 160 th session Rome, 3-7 December 2018 Proposal for an International Year of Rye

2. Tagaev AM Influence of timing and seeding rates on the timing of development of winter rye. Collection of scientific papers based on the materials of the International Scientific Ecological Conference dedicated to the Year of Science and Technology March 29–31, 2021

3. Tagaev AM, Abdurakhmonov SO Influence of timing and sowing rates on the timing of development of winter rye Bulletin of agrarian science of Uzbekistan. Bulletin of the agrarian science of Uzbekistan. 1 (85) 2021 ... 25 st.

4. Nikolaev.BS Influence of seeding norms on the yield and grain quality of winter rye in the conditions of the southern forest-steppe of Western Siberia. Siberian Scientific Research Institute of the Russian Agricultural Academy

5. "Methodology of the State variety testing of agricultural crops" (M, Kolos, 1964) was used

6. "Basic provisions for determining the economic efficiency of using the results of research and development in agriculture, new technology inventions, rationalization proposals" (M, 1987) manual was used